Picea glauca - (Betula papyrifera) / Danthonia spicata Woodland

COMMON NAME White Spruce - (Paper Birch) / Poverty Grass Woodland

SYNONYM White Spruce Rocky Woodland

PHYSIOGNOMIC CLASS Woodland (II)

PHYSIOGNOMIC SUBCLASS Evergreen woodland (II.A)

PHYSIOGNOMIC GROUP Temperate or subpolar needle-leaved evergreen woodland (II.A.4)

PHYSIOGNOMIC SUBGROUP Natural/Semi-natural (II.A.4.N)

FORMATION Conical-crowned temperate or subpolar needle-leaved evergreen woodland

(II.A.4.N.b)

ALLIANCE PICEA GLAUCA WOODLAND ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 3

USFWS WETLAND SYSTEM TERRESTRIAL

RANGE

Isle Royale National Park

This community is fairly common, especially on the southwest end of the park, and it is scattered throughout the park (less common at the northeast end).

Globally

This association is found in Michigan and Ontario.

ENVIRONMENTAL DESCRIPTION

Isle Royale National Park

This community occupies flat areas to steep slopes at elevations usually ranging from 610 to 900 feet (in one case at 1250 feet), sometimes on old beach flats or beach ridges. Soils are sandy, sandy loam, or organic, and well drained to rapidly drained.

Globally

This association has only been described at Isle Royale NP. The global description is the same as the local description until more examples can be examined.

MOST ABUNDANT SPECIES

Isle Royale National Park

<u>Stratum</u> <u>Species</u> Tree canopy *Picea glauca*

Tall shrub
Picea glauca, Abies balsamea, Sorbus decora
Short shrub
Rubus parviflorus, Diervilla lonicera
Forb
Aster macrophyllus, Aralia nudicaulis

Globally

<u>Stratum</u> <u>Species</u> Tree canopy *Picea glauca*

Tall shrub
Picea glauca, Abies balsamea, Sorbus decora
Short shrub
Diervilla lonicera, Rubus parviflorus,
Aster macrophyllus, Aralia nudicaulis

CHARACTERISTIC SPECIES

Isle Royale National Park

Picea glauca, browsed Abies balsamea, Sorbus decora

Globally

Picea glauca, Abies balsamea, Sorbus decora

VEGETATION DESCRIPTION

Isle Royale National Park

White spruce rocky woodland is an open canopy, evergreen woodland with variable physiognomy; canopy cover ranges from 10 to 60% cover. *Picea glauca* is the most abundant tree over 5 m tall, with 10 to 50% cover. *Betula papyrifera* and *Populus tremuloides* are the next most abundant trees, each with 1 to 5% cover. Shrub strata vary from about 5 to 50%

USGS-NPS Vegetation Mapping Program

Isle Royale National Park

cover by tall shrubs, from 5 to 60% cover by short shrubs, and from 0 to 60% cover by dwarf shrubs. The most abundant tall shrubs are saplings (or browsed scrub) of *Picea glauca, Abies balsamea*, and *Sorbus decora*, as well as *Alnus incana* shrubs. *A. balsamea* is uncommon in the area burned by the 1936 fire. The most abundant short shrubs are *Diervilla lonicera, Rubus parviflorus, Sambucus racemosa, Ribes glandulosum*, and *Rosa acicularis. Arctostaphylos uva-ursi* is the most abundant dwarf shrub. Herb cover is variable, ranging from about 30 to 80%. The most abundant herbs are *Aster macrophyllus, Aralia nudicaulis, Pteridium aquilinum, Cornus canadensis, Poa* spp., *Calamagrostis canadensis*, and *Deschampsia flexuosa*. Nonvascular cover is variable, ranging from 0 to 60%; the most abundant lichens are *Cladina* spp. and foliose lichens; the most abundant moss is *Pleurozium schreberi*.

Globally

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OTHER NOTEWORTHY SPECIES

Isle Royale National Park

Information not available.

CONSERVATION RANK G?.

DATABASE CODE CEGL005196

MAP UNITS 19

COMMENTS

Isle Royale National Park

This community seems to be successional after disturbance, such as logging or fire; on Isle Royale it may be kept more open than is typical as a result of heavy browsing by moose. The two species most severely impacted by moose browsing, especially at the southwest end of the island, are *Abies balsamea* and *Sorbus decora*.

REFERENCES